and truss belts for slighter cases and colectomy for the rest. Complete colectomy is a serious operation. Very few are done, for it is not a popular operation among surgeons. The mortality is not easily ascertained. Many cases recover and are greatly benefited while some cases die. There is a third class in which there is neither death nor recovery but an almost hopeless discomfort. Clark records "final results" in 12 cases: in 6 of these it was not satisfactory. The author searches for alternatives for abdominal operations, for various kinds are done and toxemia previously present disappears. It has been said of these types of operations that their good results have been produced by freeing the ileal effluent. Waugh attributes the impairment of mechanical efficiency of the bowel to the elongated retained mesentery of the ascending colon, a developmental survival present in 20 per cent. of individuals born. An easy, safe operation-fixation of anterior colon, cures and symptoms of stasis disappear. The author has carried this operation out in several cases with immediate improvement. Surgery is not the only remedy advocated. Diets, paraffin, massage, exercises, posture, spa treatment, removal of toxic foci, all have their place in treatment of intestinal stasis. Prevention should be our final goal. It should be instituted in babyhood and continue for the earlier the treatment the better, because then the less severe and more effective it is.

Acidosis in Operative Surgery.—FARRAR (Surg., Gyncc. and Obstet., 1921, xxxii, 328) says that there is great need for collaboration between the surgeon and the physiologist, as the time may be all too short for the study of a condition suddenly confronting the surgeon at or immediately following an operation. Acidosis is a term used to signify an impoverishment of the body in bases. The alkali reserve (bicarbonates of the blood) is the criterion of the acid-base balance of the body. The determination of the alkali reserve is readily made by Van Slyke's method. (The number of cubic centimeters of carbon dioxide gas which 100 c.c. of blood plasma will take up.) A high carbon dioxide combining power of the blood is of the greatest importance for the maintenance of lung ventilation during operation. The range of the carbon dioxide combining power of the blood in women (150 cases) is 55.2 c.c. to 69.9 c.c. per 100 c. c. of the blood plasma or about 8 points lower than Van Slyke found for men. It follows, therefore, that acidosis is more frequent following operations in women than in men. The fall in alkali reserve during operation depends not only upon the anesthetic and the duration of the operation but upon the nature of the operation and the occurrence of hemorrhage and shock. Moreover, the fall in alkali reserve bears a close relation to the fall in blood-pressure and pulse pressure. If a fall in blood-pressure is prevented, there is a saving in alkali reserve. A solution of glucose given intravenously during an operation at the rate of 0.8 gram of glucose for every kilogram of body weight each hour of the operation will lessen the acidosis incident to operation by promoting metabolism. Vomiting is diminished and diuresis promoted by this measure. Glucose will appear in the urine in one-half hour if this rate has been exceeded. A solution of gum acacia (6 per cent.) in a glucose solution (20 per cent.), if given a subtolerant rate the entire time of operation, is an aid to the maintenance of blood-pressure.

## PEDIATRICS

UNDER THE CHARGE OF

THOMPSON S. WESTCOTT, M.D., AND ALVIN E. SIEGEL, M.D., OF PHILADELPHIA.

A Mild Chronic Nephritis in Children.—Hill (Jour. Am. Med. Assn., August 28, 1920) gives the test that he uses to determine the presence of acute nephritis. In mild cases a fixation is shown where the phenolsulphonephthalein test is normal. A fixation does not necessarily mean a severely damaged kidney, but it is an indication at least that the kidney function is abnormal. The child is put on a full normal diet containing a considerable amount of protein, especially at the noon meal. A capsule containing 1 gm. of salt and a 2 grain pill of caffein sodium benzoate is given with each meal, to take the place of the tea or coffee used in the adult test diet. This gives a diet containing a considerable amount of salt, protein and diuretic material, all of which will stimulate the kidney to its maximum effort. Exactly 10 ounces of fluid is given with each meal and no fluid or food whatever is given between meals. The urine is collected in two-hour periods from 7 A.M. to 7 P.M. and the night urine from 7 P.M. to 7 A.M. Then all that is required is to record the specific gravity of each sample of urine. The normal response shows a wide variation in gravity between the different specimens; in fifteen normal children there was always a variation of at least eight points between the highest and the lowest. The night urine in normal children is small in amount, and almost always has a specific gravity of 1020 or over. The child with damaged kidneys on the other hand, is unable to vary the concentration of the urine in this way, and the gravity of the individual specimens may vary only one or two points. The fixation may be at a high or at a low level, and may be high or low in the same patient at different times. It is apparently the fixation of the gravity that is important and not the level at which it is fixed. This is the most practical test for everyday use. There is nothing complicated about it. The food does not have to be weighed, nor is it necessary for the patient to eat all of it. It is merely essential that he consume a good full diet. The rules for fluid intake must, however, he strictly adhered to. As regards blood urea, the writer thinks that the fixation is shown even in cases where there is not sufficient damage to give marked urea retention.

Weight and Height in Relation to Malnutrition.—EMERSON and MANNY (Arch. Ped., August, 1920) point out that malnutrition is a definite clinical entity with characteristic history, definite symptoms and pathological physical signs. Clinical evidence shows that the physical signs that may best serve to identity this group of malnourished children is the relationship between weight and height. The age factor is of secondary importance, and is mainly serviceable in selecting cases stunted by constitutional disabilities such as syphilis, tuberculosis, deficient thyroids, the effect of certain drugs, convalescence from long